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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,762	08/19/2003	Andrew Kent	05986/000M673-US0	3914
7278	7590	07/01/2005	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			NGUYEN, VIET Q	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*Supplemental*  
**Office Action Summary**

Application No.

10/643,762

Applicant(s)

KENT ET AL.

Examiner

Viet Q. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Pre-amendment filed on 5/24/2005.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 and 23-36 is/are allowed.
- 6) ☒ Claim(s) 21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/12/05 & 5/24/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This action responds to the newly filed pre-amendment on **5/24/2005**. Since the last office action (dated **6/14/2005**) only responds to original claims (**1-33**, filed on **8/19/2003**) based on the previous restriction action dated **1/10/2005**; and because the newly submitted claims **34-36** (filed 5/24/2005) in the pre-amendment has not been timely entered and previously considered by the examiner, this action will supplement the last office action with all present claims **1-36** as now pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.*  
*Patentability shall not be negated by the manner in which the invention was made.*

3. Claim **21** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Sharma et al (6,750,491)**.

The reasons for this claim rejection have been fully set forth in the last office action dated 6/14/2005. See last office action paper.

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4. Claim 22 is objected as being dependent upon claim 21; however, it contains allowable subject matter with regard to the claimed feature of “***applying current in a sub-nanosecond***” of time, which is not clearly or fairly suggested elsewhere in the prior arts.

5. As indicated in last office action, other claims 1-20, 22-36 all contain allowable subject matter over prior arts of record with regard to the claimed features of "a read-out magnetic layer", "sub-nanosecond current pulses", and the specific magnetic-material groups for making such magnetic layers, etc.

Particularly, prior arts do not clearly show the particular configuration of independent claims 1 & 14 such as “a second non-magnetic layer that spatially separates said free magnetic layer and said read-out magnetic layer such that the mutual magnetic interaction between said free layer and said read-out layer is minimized”.

Furthermore, prior arts also do not teach the particular claimed method as recited in independent claim 23, for example, e.g., “forming a read-out magnetic layer with a magnetization vector with a fixed magnetization direction on said second non-magnetic layer”.


Other dependent claims are also allowable as they are dependent upon their respective base claims as well.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Nguyen whose telephone number is (571) 272-1788. The examiner can normally be reached on 7am-6pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on (571) 272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
V. Nguyen  
6/26/2005

Viet Q Nguyen  
Primary Examiner  
Art Unit 2827

